

COMMONWEALTH of VIRGINIA

Department of Health DIVISION OF SHELLFISH SANITATION 109 Govenor Street, Room 614-B Richmond, VA 23219

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JAMES RIVER: MULBERRY POINT TO JAMESTOWN ISLAND
James City County and City of Newport News
Growing Area #059
Shoreline Sanitary Survey

Date: September 22, 2005

Survey Period: June 9, 2005 to August 12, 2005

Total Number of Properties: 71 **Surveyed by:** J.E. Merritt

SECTION A: GENERAL

This survey area extends from Reference Point 59 at the west end of the Colonial National Parkway bridge to Jamestown Island on Glass House Point, including the James River shoreline between these two points, Fort Creek, Morleys Gut, Blows Creek, Milstead Creek, (Island Creek to the railroad bridge), Eustis Lake, Skiffes Creek to the Skiffes Creek Reservoir Dam (Bailey Creek and Wood Creek), Grices Run, Grove Creek, College Creek, to Rt. 199 (Halfway Creek and Papermill Creek), the Thorofare/Back River (Mill Creek, Back River Marsh, and Kingsmill), Sandy Bay(Powhatan Creek to Rt.31), Passmore Creek, and all it's tributaries.

The topography of the area is one of deeply folded hills and ravines facing a large primary tidal river with numerous streams and estuaries penetrating inland. Elevations vary from 5' around the shoreline to a maximum of 80' at the outer edge of the survey boundary. The population density ranges from moderate to heavy in privately owned sections and overall growth is heavy, particularly around Williamsburg. Tourism leads to heavy seasonal fluctuations in the local population and is expected to increase significantly as the 400th anniversary of the Jamestown settlement arrives in 2007. Government owned tracts that comprise a significant portion of the survey area are more sparsely populated. The economy is primarily based on tourism, military installations, and general commerce.

Meteorological data indicated that the area received a total of 6.36" of precipitation for the survey period. A monthly breakdown of this data is as follows:

 June 6-30, 2005
 0.32"

 July, 2005
 4.83"

 August 1-12, 2005
 1.21"

 Total
 6.36"

The James River Reserve Fleet is in the process of being scrapped, as the condition of the vessels in the fleet has degraded to the degree that many have become pollution (fuel oil) threats. Only 16 of the 71 ships that currently comprise the fleet are to be retained. Also, the Fort Eustis and BASF STP's have been taken off-line. Fort Eustis' sanitary waste is now treated at the Hampton Roads Sanitation District's Williamsburg STP. BASF is no longer in operation and does not produce any sanitary waste to treat. In addition, James City County has installed significant amounts of new sanitary sewerage within and around the boundaries of the current survey area. This fact, combined with changes in the locations of



the survey's boundaries have reduced the number of qualifying properties in this survey from 254 in 1998 to 71 at the present time.

The current restriction on shellfish harvesting is contained in the Notice and Description of Shellfish Area Condemnation #23, James River Opposite Fort Eustis, revised 7 January 2004; Condemned Shellfish # 67, James River Opposite Tribell Shoal, revised 27 December 2004; and, Condemned Shellfish Area # 69, Upper James River, revised 27 December 2004. A copy of the current condemnation notices and associated maps are attached to this survey report.

This report lists only those properties which have a sanitary deficiency or have other environmental significance. "Direct" indicates that the significant activity or deficiency has a direct impact on shellfish waters. Individual field forms with full information on properties listed in this report are on file in the Richmond Office of the Division of Shellfish Sanitation and are available for reference until superseded by a subsequent resurvey of the area.

Data in the report is also made available to local health departments and other agencies to address items that may be out of compliance with their regulatory programs.

SECTION B: SEWAGE POLLUTION SOURCES

SEWAGE TREATMENT FACILITIES

13. **DIRECT** – Occupant: Williamsburg Sewage Treatment Plant, 300 Ron Springs Drive, Williamsburg, 23185. Owner: Hampton Roads Sanitation District, PO Box 5000, Virginia Beach 23455. Approximately 50,000 persons served. Design flow 22.5 MGD. VPDES Permit # VA0081302. Treatment facility consists of 1 parshall flume, 4 bar screens, 2 grit removal chambers, 3 primary clarifiers, 2 secondary clarifiers, 4 activated sludge aeration tanks, 3 trickling filters, 3 tertiary clarifiers, 10 sludge pumps, 2 chlorine contact tanks. Final effluent discharges to James River. Sludge disposal consists of 1 flotation thickening tank, 2 gravitational thickening tanks, 4 gravity belt thickening units, 3 centrifugation tanks, 5 sludge pumps, and 2 incineration furnaces. The incinerator ash is disposed of in an approved landfill. The most recent OWP/DEQ inspection report is attached.

ON-SITE SEWAGE DEFICIENCIES

- 18. CONTRIBUTES POLLUTION Location: 1781A Treasure Island Road, Williamsburg, 23185. Dwelling- white and brown mobile home with cream skirt. No contact. Hand dug trench running from the septic tank to brush surrounding non-tidal fresh marsh. Evidence of recent eruption. Septic odor present. Sanitary Notice issued 7/22/05 to field #25.
- 19. CONTRIBUTES POLLUTION Location: 1781B Treasure Island Road, Williamsburg, 23185. Dwelling- blue vinyl frame 2 story. No contact. Evidence of recent erupting of septic effluent to ground surface in the vicinity of the septic tank lid. Septic effluent and odor, algal mat present. Sanitary Notice issued 7/22/05 to field #26.
- 24. CONTRIBUTES POLLUTION (Kitchen or Laundry Wastes) *DIRECT* Location: 262 Sandy Bay Road, Williamsburg 23185. Dwelling- Cream wood frame 1 story and corrugated metal outbuilding. No Contact. Black corrugated black plastic hose exiting rear wall of sheet metal building near clothes washer and leading to the waterline of Powhatan Creek. Sanitary Notice issued 8/12/05 to field #49.

POTENTIAL POLLUTION

23. Occupant: Cooke's Landscaping, 1826 Jamestown Road, Williamsburg 23185. Owner: Jeff Schell, 1826 Jamestown Road, Williamsburg 23185. Business- Corrugated fiberglass paneled 1 story garden shop and butler type metal outbuilding. ~10 employees. Manager reports toilets back up following heavy rainfall. No evidence of eruption at the time of survey.

SECTION C: NONSEWAGE WASTE SITES

INDUSTRIAL WASTES

- 1. **DIRECT** Occupant: James River Reserve Fleet, 2606 Harrison Rd., Fort Eustis 23604. Owner: United States Maritime Commission, United States Department of Transportation, Washington D.C. Military support installation. 80 persons. Observed on-shore were 1 x 10,000 gallon above ground storage tank (empty), 2 x 500 gallon above ground storage tank containing diesel fuel, 1 x 500 gallon above ground storage tank containing gasoline (all coffer dammed), and 2 oil/water separators for the treatment of bilge water. Off-shore were 71 'mothballed' ships. These vessels have been the source numerous small fuel oil leaks from leaking hulls in recent years and there is significant potential for these or worse to continue as the vessels increase in age. As a result, the Reserve Fleet is being down-sized to 16 ships from its present level. Each vessel is inspected at least monthly and is outfitted with a portable toilet that is pumped on a routine basis. The facility has 1 storm water discharge (outfall #76). Shares VPDES Permit # VA0025216 from the Department of Environmental Quality, Water Regional Office with Fort Eustis.
- 2. DIRECT Occupant: United States Transportation Center, Department of the Army, ATZF-PWE, building 1407, Fort Eustis 23604. Owner: United States Department of Defense, Washington, D.C. 20222. Military installation. ~ 25,000 persons. The facility has 81 above ground storage tanks over 500 gallons capacity with a total capacity of 148,900 gallons storing fuels, lubricants, solvents, and oily waste water. Because the base is positioned on both sides of the present survey boundary, not all tanks are located in the survey area. Those not located in Survey Area 59 are located in Survey Area 58. There are currently 27 superfund sites located within the present survey boundary. They include retired landfills (unlined), tank areas, dredge/sludge areas, pesticide storage areas, firefighting training areas, maintenance shops, and artillery range and impact areas. These areas have been found to be most commonly contaminated with PCB's, petroleum distillates, metals, and volatile organic compounds. Each site is screened for pollutants quarterly. The base has 81 outfalls, 79 of which are for storm water (outfall #76). Shares VPDES Permit # VA0025216 from the Department of Environmental Quality, Water Regional Office with the James River Reserve Fleet.
- Occupant: Colonial Pipeline –Yorktown, 147 Blows Flats Road, Lee Hall 23603. Owner: Colonial Pipeline Company, 2607 Willard Road, Richmond 23294. Business- fuel delivery facility. No Contact. The facility has a series of subsurface drains surrounding the equipment. These collect storm water which is channeled to an oil/water separator and from there into a retention basin. The final effluent discharges into an unnamed tributary of Wood Creek, and from there to Skiffe's Creek and the James River. Has VPDES Permit # VA0051870 from the Department of Environmental Quality, Water Regional Office.

- 6. Location: End of Blows Flats Road, Lee Hall, 23603. Occupant: H. Branscome Construction Company, 1922 Pembroke Avenue, Hampton 23661. Owner: James City County, 101 Mounts Bay Road, Williamsburg 23185. Business- Active borrow pits (sand/clay/marl/gravel). No Contact. Has Permit # 10445 from the Virginia Bureau of Mines.
- 7. S. House Manning Construction Company, 160 Blows flats Road, Lee Hall 23603. Business-heavy construction with large heavy equipment storage and repair yard. 10 employees. Observed on-site 2 above ground storage tanks over 500 gallons in capacity for fuels.
- 8. S.A. Seaman Concrete Company, 1571 Manufacture Boulevard, Lee Hall 23603. Business-concrete mixing/loading/distribution. 20 employees. Observed on-site 2 above ground storage tanks over 500 gallons in capacity for fuels.
- 9. Occupant: Virginia Natural Gas, 1979 Pocahontas Trail, Williamsburg 23187. Owner: AGL Resources, PO Box 4569, Atlanta, Georgia 30302. No Contact. Business- natural gas pipeline peak shaving facility.
- Occupant: A&K Railroad Materials Inc., 1505 South Redwood Road, PO Box 30076, Salt Lake City, Utah 84130. Owner: BASF Fibers, 8961 BASF Drive, PO Drawer D, Williamsburg 23187. No Contact. Business- storage yard for large quantities of newly creosoted rail ties.
- 11. Occupant: Mann Industries, Inc., PO Box 919, Williamsburg 23187. Owner: BASF, 8961 BASF Drive, PO Drawer D, Williamsburg 23187. No Contact. Business- Former acrylic fiber manufacturing plant now permanently closed. Soils at this site have been found to be contaminated with a number of organic compounds and is being remediated *in situ* by underground air injection. The plant's private STF has been demolished. Has storm water permit to discharge to Wood Creek, Grices Run, and the James River. Has VPDES Permit # VA 0003654 from the Department of Environmental Quality, Water Regional Office.
- Location: Williamsburg / Jamestown Airport, Jean Waltrip, Manager, 100 Marclay Drive,
 Williamsburg 23185. No Contact. Business- general aviation airport. Observed on-site 2 above ground storage tanks over 500 gallons in capacity for fuels.
- 23. Occupant: Cooke's Landscaping, 1826 Jamestown Road, Williamsburg 23185. Owner: Jeff Schell, 1826 Jamestown Road, Williamsburg 23185. Business- Corrugated fiberglass paneled 1 story garden shop and butler type metal outbuilding. ~10 employees. Observed on-site 2 above ground storage tanks over 500 gallons in capacity for fuels.
- 61. Occupant: Jamestown Yacht Basin, 2080 Jamestown Road, Williamsburg 23185. Owner: T.R. Vermillion, PO Drawer CB, Williamsburg 23185. Marine- private marina. 3 employees. Observed on-site 2 above ground storage tanks over 500 gallons in capacity for fuels.

SOLID WASTE DUMPSITES

11. Occupant: Mann Industries, Inc., PO Box 919, Williamsburg 23187. Owner: BASF, 8961 BASF Drive, PO Drawer D, Williamsburg 23187. No Contact. Business- Former acrylic fiber manufacturing plant now permanently closed and undergoing demolition. Only the main office and 3 adjacent buildings, as well as 2 other buildings on the site that are being leased, remain standing. All other structures, including the former STF have been demolished and the debris left in place.

17. T&S Disposal / Waltrip Recycling, Larry T. Waltrip, 11 Marclay Drive, Williamsburg 23185. No Contact. Business- 5 acre landfill (construction and site preparation waste only) and mulch manufacture and distribution. Has Solid Waste Permit # 322 from the Department of Environmental Quality, Water Regional Office.

SECTION D: BOATING ACTIVITY

- Occupant: James River Reserve Fleet, 2606 Harrison Rd., Fort Eustis 23604. Owner: United States Maritime Commission, United States Department of Transportation, Washington D.C. Military support installation. 80 persons. Off-shore were 71 'mothballed' ships. These vessels have been the source numerous small fuel oil leaks from leaking hulls in recent years and there is significant potential for these or worse to continue as the vessels increase in age. As a result, the Reserve Fleet is being down-sized to 16 ships from its present level. Each vessel is inspected at least monthly and is outfitted with a portable toilet that is pumped on a routine basis. Has on-shore sanitary facilities and solid waste receptacles. Does not have a Virginia Department of Health Marina Program form.
- 4. Occupant: Skiffes Creek harbor, United States Transportation Center, Department of the Army, ATZF-PWE, building 1407, Fort Eustis 23604. Owner: United States Department of Defense, Washington, D.C. 20222. Military installation. ~ 25,000 persons. Training harbor containing ~35 amphibious and small cargo vessels. Has on-shore sanitary facilities and solid waste receptacles. Does not have a Virginia Department of Health Marina Program form.
- 14. Kings Mill Marina, Kings Mill Road, Williamsburg 23185. Owner: Kings Mill Property Owners Association, 100 Kings Mill Road, Williamsburg 23185. Private marina. 3 employees. 75 slips available. Boating services provided are fuel, water, electricity, and in-out ramp. Containers are available for solid waste disposal. Sanitary facilities provided are 2 commodes, 2 urinals, 2 lavatories, 1 shower for men, and 3 commodes, 2 lavatories, and 1 shower for women. Sewage disposal is by connection to the Hampton Roads Sanitation District. Boat holding tank pump-out facilities and dump station facilities are provided at this location.
- 22. Jamestown Marina, Wanda S. Heath, 297 Neck-o-Land Road, Williamsburg 23185. Commercial marina. 3 employees. 14 slips and 9 dry storage spaces available. Present at the time of survey were 1 pleasure boat under 26'and 4 pleasure boats over 26', and in dry storage there were 4 pleasure boats under 26'. Boating services provided are fuel, water, electricity, repair services and in-out ramp. Containers are available for solid waste disposal. Sanitary facilities provided are 1 commode, and 1 lavatory for men, and 1 commode, and 1 lavatory for women. Sewage disposal is by connection to the Hampton Roads Sanitation District. Dump station facilities are provided at this location. Has an exemption to the requirement to provide boat holding tank pump-out facilities.
- 25. Jamestown Yacht Basin, 2080 Jamestown Road, Williamsburg 23185. Owner: T.R. Vermillion, PO Drawer CB, Williamsburg 23185. Commercial marina. 3 employees. 88slips and 30 dry storage spaces available. Present at the time of survey were 9 pleasure boats under 26'and 49 pleasure boats over 26', and in dry storage there were 20 pleasure boats under 26'. Boating services provided are fuel, water, electricity, repair services and in-out and in-out ramp. Containers are available for solid waste disposal. Sanitary facilities provided are 2 commodes, 1 urinal, 2 lavatories, and 1 shower for men, and 3 commodes, 3 lavatories, and 1 shower for women. Sewage disposal is by on-site septic tank. Boat holding tank pump-out facilities and dump station facilities are provided at this location.

OTHER PLACES WHERE BOATS ARE MOORED

15. Kings Point, North Point Drive, Williamsburg 23185. Owner: Kings Point Club, Inc., PO Box 365, Williamsburg 23185. Private Country Club. No Contact. 8 slips available. The only boating service provided is an in-out ramp. Sanitary facilities provided are 1 commode, 1 lavatory; 1 shower for men, and 1 commode, 1 lavatory; 1 shower for women. Sewage disposal is by connection to the Hampton Roads Sanitation District. There are no dump station facilities at this location. Has exemption to the requirement boat holding tank pump-out facilities.

UNDER SURVEILLANCE

-None-

SECTION E: CONTRIBUTES ANIMAL POLLUTION

- 3. **DIRECT -** Fort Eustis Riding Stables. United States Transportation Center, Department of the Army, ATZF-PWE, building 1407, Fort Eustis 23604. Owner: United States Department of Defense, Washington D.C. 20222. Recreational riding stable on a military installation. ~ 25 persons. Present at the time of the survey were 26 horses in a fenced pasture 100' from the James River at 5' elevation. Manure is land applied on-site.
- 12. Occupant: Carter's Grove Plantation, Pocahontas Trail, Williamsburg 23185. Owner: Colonial Williamsburg Foundation 23187. Public- restored colonial plantation. 3 employees (closed to public). Houses livestock used at Colonial Williamsburg. Present at the time of the survey were 12 cattle, 6 oxen, and 5 horses in barns and a stable, respectively with attached fenced pastures approximately 2500' from the James River at 70' elevation. Manure is land applied on-site.
- 20. Occupant: 1801 Treasure Island Road, Williamsburg 23185. Agricultural livestock farm. 2 persons. Present at the time of the survey were 50 beef cattle and 30 goats in barn and fenced pastures 250' from impounded stream and eventually to the James River at 15 ft. elevation. Manure is stock piled on-site.
- 21. Location: 2205 Treasure Island Road, Williamsburg 23185. Agricultural chicken farm. No contact. Present at the time of the survey were ~250 hens housed in a broiler house 2500' from tidal portion of Mill Creek at 15 ft. elevation. Manure is stock piled on-site.

SUMMARY

Area #059

JAMES RIVER: MULBERRY POINT TO JAMESTOWN ISLAND

September 22, 2005

SECTION B: SEWAGE POLLUTION SOURCES

1. SEWAGE TREATMENT FACILITIES

- 1 DIRECT # 13
- 0 INDIRECT None
- 1 B. 1. TOTAL

2. ON-SITE SEWAGE DEFICIENCIES

Correction of deficiencies in this section is the responsibility of the local health department.

- 0 CONTRIBUTES POLLUTION, DIRECT None
- 2 CONTRIBUTES POLLUTION, INDIRECT # 18, 19
- 1 CP (Kitchen or Laundry Wastes), DIRECT # 24
- 0 CP (Kitchen or Laundry Wastes), INDIRECT None
- 0 NO FACILITIES, DIRECT None
- <u>0</u> NO FACILITIES, INDIRECT None
- 3 B. 2. TOTAL

3. POTENTIAL POLLUTION -

Periodic surveillance of these properties will be maintained to determine any status change.

1 - POTENTIAL POLLUTION - # 23

SECTION C: NON-SEWAGE WASTE SITES

1. INDUSTRIAL WASTE SITES

- 2 DIRECT # 1, 2
- 10 INDIRECT # 5, 6, 7, 8, 9, 10, 11, 16, 23, 25
- 12 C. 1. TOTAL

2. SOLID WASTE DUMPSITES

- 0 DIRECT None
- <u>2</u> INDIRECT # 11, 17
- 2 C. 2. TOTAL

SECTION D: BOATING ACTIVITY

- 5 MARINAS # 1, 4, 14, 22, 25
- 1 OTHER PLACES WHERE BOATS ARE MOORED # 15
- 0 UNDER SURVEILLANCE None
- 6 D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

- 1 DIRECT # 3
- <u>3</u> INDIRECT # 12, 20, 21
- 4 E. TOTAL

